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ABSTRACT

A study reports on a six-week remedial program designed to help youth at residential care group homes maintain their skill levels in reading and math during summer vacation. Twenty-nine children, all of whom were considered educationally at risk, were selected from seven residential care homes for the project. Most of the children's Wide Range Achievement Test-Revised (WRAT-R) scores revealed significantly deficient achievement levels in reading and math skills. Educators (teachers, special education coordinators, school counselors, principals, and superintendents) from the three school districts in which the homes were located were surveyed about the need for such a remedial summer program. All responding educators indicated a need for the program. The program incorporated techniques of individualized instruction and cooperative learning teams, and remedial reading and math instruction were combined with an "earning while learning" monetary reinforcement system. Pretests and posttests of math and reading achievement, using the reading and math sections of the Quick-Score Achievement Test, were administered on the first and last day of the class. Posttests indicated that both math and reading achievement levels were maintained throughout the six-week period. (Thirteen tables of data are included, and 15 appendixes and 26 references are attached.) (MM)

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SUMMER REMEDIAL PROGRAMMING IN RESIDENTIAL CARE TO SHARPEN READING AND MATH SKILLS

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A Practicum Report Presented to the National
Master's Program for Child Care Adminsitrators
in Partial Fulfillment of the Requirments
for the degree of Master of Science

NOVA UNIVERISTY

1988

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AUTHORSHIP STATEMENT

I hereby testify that this paper and the work it reports are entirely my own. Where it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholary and editorial practice. I give this testimony freely, out of respect for the scholarship of other workers in the field and in the hope that my own work, presented here, will earn similar respect.

Author Gary D. Bennett Date 11-28-88

ABSTRACT

Summer Remedial Programming In Residential Care to Sharpen Reading and Math Skills. Bennett, Gary D., 1988: Practicum Report, Nova University, Master's Program for Child Care Administrators. Descriptors: Remedial Program / Remedial Reading / Remedial Mathematics / Summer Programs / Summer School / Tutoring / Educational Needs / Educationally Disadvantaged / Student Development / Deliquent Rehabilitation.

Most of the troubled youth placed in residential care are educationally at risk. During their school years, these students must acquire the skills and attitudes that will enable them to master all kinds of new skills and understanding later in life. A summer remedial program was undertaken to help sharpen (maintain) reading and math skills, two of the foundational sujects needed for proper development of life skills.

Utilizing certified teachers and involving more than one-third of the residents in placement at the writer's agency, a six week summer remedial program was designed and implemented. Incorporating techniques of individualized instruction and cooperative learning teams, reading and math remedial instruction were combined with a unique "earning while learning" monetary reinforcement system.

Findings of the project were significant and resultant benefits deemed positive. The demonstrated effectiveness of this short-term summer remedial project has become a regular program at the writer's agency, and should be of interest to other child care professionals, educators, and those interested in the educational welfare of troubled youth.

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BACKGROUND

The Agency and Community Setting

The agency is a fully licensed, state approved, non-sectarian facility, founded in 1966. Its primary purpose has remained unchanged: To work with troubled males, 11 - 17 years of age, providing residential care treatment through a community-based program. Over the past decade, the agency has expanded its programs to include males and females from birth to 18 years of age, and to provide services to families. As a full-service facility, the agency provides: 1) residential care, 2) specialized and general foster care, 3) specialized and general adoptions, 4) independent living services, and 5) family counseling services on an outpatient basis. The agency has also opened satellite offices in two large urban cities, each within two hours drive of the agency's main office.

The main ofice is located in a rural Michigan city of 2,000 people, and is the only location where the residential care services are offered. The administration complex is centrally located to the three residential care campuses. Each campus consists of farm land, comprising a total of 350 acres, and each campus is located in a separate public school district. There are seven specially designed and built ranch-style homes, with no more than three homes on a campus.

The agency employs married teaching-parent couples who live in a group home with their own children and ten residential children. The residents are legally dependent, neglected, abused and/or delinquent. Treatment emphasis for the teaching-parents is on family group living, often with the purpose of rebuilding a child's love for family life. The teaching-parents serve as role models for both the children and their families, and are charged with typical child care responsibilities and other professional duties related to behavioral shaping.

The agency links its family milieu with psychosocial therapy by supplying every group home with a master's level therapist whose maximum caseload consists of the ten residents placed there. The therapist provides individual and group therapy to the residents, serves as their school liaison representative since the agency utilizes public schools for education, and works in close partnership with the teaching-parents to facilitate change in each child's life.

The school districts serving the three campuses are fairly typical rural districts with dedicated staff, limited resources, and strong parental support. Over the past five years, as the agency's population has shifted to children with more severe behavioral and academic problems, each school district has responded by setting up special self-contained classrooms. The Michigan State Board of

Education (1986) dictates clear guidelines for properly working with the emotionally impaired and learning disabled, and all three public school districts have complied with these standards while striving to meet the agency's educational needs.

It is this cooperative relationship between each public school district and the agency that enables the agency to remain an effective community-based treatment program. Nevertheless, the type of children being referred to the agency are those who are at-risk educationally, and who are presenting marked educational deficiencies in their school placements. Simple academic gains achieved during the regular school year, by students who are educationally at risk, often become blunted with summer absence from the classroom. Therefore, this problem-solving project attempted to address this particular educational need.

It is the writer's responsibility, as director of social services for the agency, to promulgate treatment services which impact on children and their families in a way that causes them to improve their quality of life; socially, mentally, physically and spiritually. This includes supervising, directly or otherwise, the delivery of services at all office locations and all levels of agency programming. It also includes, in the case of the community-based residential care program, monitoring the

receipt of educational services from the local schools on behalf of the agency's residents.

Chapter 2

STUDY OF THE PROBLEM

Problem Statement

Children placed in the agency's residential care program usually have had a marked educational disadvantage as compared to other students. Most are already far below "normal" age level in reading and math, the two foundational subjects necessary for appropriate development of life skills. Since the agency utilizes public schools for education, simple gains achieved during the regular school year are often blunted with summer absence from the classroom. Therefore, many of the agency's residents continue through school, and life, with deficient skills.

Realistically, nothing will alter the fact that children must be placed into the agency's care who are educationally at risk. Certainly, though, the agency had to take steps to help maintain their reading and math levels during the summer vacation from public school. It was believed to do so could keep some students from losing previously achieved gains; and perhaps even enable them to be better prepared for new learning with the onset of a new school year. In the history of the agency, the following problem had never been addressed: How to help the agency's residents to maintain

their skill levels in reading and math during summer vacation.

Evidence

To determine whether or not the agency's residents had an educational need for remedial help, a formal needs assessment was conducted. This included assessing the student's achievement levels in reading and math as normed by age, not grade level, for greater accuracy; and then surveying key educators in all three school districts to create a balanced and objective needs assessment.

First, a sample population was identified from the agency's residential program. The criteria used to identify the sample population were two-fold: 1) each child had to have a Wide Range Achievement Test- Revised form (WRAT-R) by Jastek and Wilkinson (1984) completed within the past twelve months; 2) the target population had to include at least two, but not more than five, residents from each of the seven group homes; thus ensuring a fair cross-section of the agency's residential program.

Final sample size included 29 children (Appendix A:68). Of the 29 children, most had WRAT-R scores which were less than twelve months old. Those who did not were administered new tests, and the updated scores were used. The sample consists of five children from four of the agency's group homes, four children from one group home, three

children from one group home, and two children from the one remaining group home.

The WRAT-R was utilized because it is the one achievement test which every resident had in common. The agency's psychologist administers the WRAT-R, as one part of a complete battery of tests, to every resident within 30 days of initial placement and annually, thereafter, for the duration of placement. The WRAT-R was revised in 1984 and tests the child's achievement in the basic educational skills of reading, math and spelling as compared to a representative national sample of same-age children. The 1984 national norms were drawn to create a representative sample controlled for mental ability, sex, ethnic and socio-economic background, making the WRAT-R a very reliable descriptor of actual achievement levels. Only the reading and math scores from each child's WRAT-R results were considered in this sampling.

The percentage of the sample population's achievement levels, in reading and math, were tabulated from the raw data in Appendix A:68 and those percentages are displayed in Table 1.

Table 1

Percentage of the Sample Population's Achievement Levels in Reading and Math, Derived From the WRAT-R Scores in Appendix A

	Reading Achievement	Math Achievement
Above-age-level	13.8%	17.2%
At-age-level	6.9%	0.0%
Below-age-level	79.3%	82.8%
Totals (N=29)	100.0%	100.0%

In the above table, it can be seen that 79.3 percent of the sample population had below-age-level reading skills; while 83.0 percent of the same population had below-age-level math skills. This was, therefore, a clear and significant indication that a portion of the agency's residents had a definite educational need for remedial help.

The next item examined was in regards to the deficiency of the sample populations's achievement levels. Drawing from the raw data in Appendix A:68 the 79.3 percent of the sample population who were below-age-level in reading, ranged from

one-half to six grades behind in their basic reading skills. In terms of the 83.0 percent of the same population who were below-age-level in math, they ranged from one-half grade to seven and one-half grades behind in math skills.

Table 2

Comparison of Reading and Math Achievement Levels as a Percent of the Sample Population, Derived from the WRAT-R Scores in Appendix A

	Math Achievement Above-age-level	Math Achievement At-age-level	Math Achievement Below-age-level
Reading Achieve. Above-age-level	0.0%	0.0%	13.8%
Reading Achieve. At-age-level	3.4%	0.0%	3.4%
Reading Achieve. Below-age-level	13.8%	0.0%	65.5%

N=29

From the data in Table 2, when comparing the reading and math achievement levels using the WRAT-R scores from Appendix A:68, 65.5 percent of the sample population were below-age-level in both reading and math skills. Again, this was a significant indication of the need for remedial help in reading and math. Furthermore, of those children who scored above-age-level in reading, everyone

of them were below-age-level in math. Interestingly, the converse of this comparison relationship was also true. Of those children who scored above-age-level in math, all were below-age-level in reading. Both of these groupings composed 27.6 percent of the sample population, or 13.8 percent respectively as seen in Table 2.

In order to conduct a balanced needs assessment, and objectively determine whether or not this problem merited possible resolution, a separate survey of educators in all three school districts was undertaken. A letter (Appendix B:70) and a five part questionnaire (Appendix C:72) were mailed to teachers, special education coordinators, school counselors, principals, and superintendents in each of the school districts. Key teachers were identified as those having students from the agency in their classrooms. Six days later, a follow-up letter (Appendix D:74) was sent to each of the non-respondents along with another survey (Appendix C:72). Enclosed within each mailing was a prepaid business return envelope for the respondent's mailing convenience. Forty-five educators were included in the original mailing, and 40 responded yielding an 88.9 percent return rate. Results of the survey are detailed in Tables 3 - 7.

Table 3

Results of Question One on the Survey Instrument Used with Key Educators, from Appendix C

During the 1988 summer vacation, (name of agency) may provide a six week remedial program with an emphasis on reading and math skills. Should (name of agency) provide such?		
Yes	40	100.0%
No	0	0.0%
Total (N=40)	40	100.0%

In table three, 100 percent of the educators who responded and returned their survey, indicated that the agency should provide a six week remedial program in reading and math. This overwhelming and unanimous response was unexpected, but it definitely verified the need. The results of this sampling of public educators from three different school districts, all being professionals from outside the agency, clearly mandated that the agency should provide summer remedial help to the children in its care. This fact is further evidenced in Table 4.

Table 4

Results of Question Two on the Survey Instrument Used with Key Educators, from Appendix C

In your professional judgement, what effect does summer absence from the classroom have on educational gains achieved during the previous school year, especially for students who are educationally at risk?		
No effect; gains are retained	0	0.0%
Some effect; gains often diminished	24	60.0%
Significant effect; gains are lost	14	35.0%
No opinion	2	5.0%
Total (N=40)	40	100.0%

In their professional judgement, 60.0 percent of the educators who responded felt that summer absence from the classroom has some effect on educational gains achieved from the previous school year, especially for students who are educationally at risk as shown in Table 4. This same 60.0 percent of the respondents felt, based on the qualifier linked with the response item "some effect", that educational gains are often diminished during summer absence from the classroom. In contrast, 35.0 percent of the respondents believed that gains are lost and summer absence has a significant effect on previously achieved gains. Each of these two items are substantial in and of

themselves; yet when combined, they signify that 95.0 percent of the responding educators believed that summer absence from the classroom has a definite effect on students' achieved gains. The educators further validated this finding through their responses to the next two survey questions displayed in Table 5 and Table 6, with the only differences occurring in their opinion as to the degree of effect summer absence has on reading and math skills.

Table 5

Results of Question Three of Survey Instrument Used with Key Educators, from Appendix C

At the beginning of the school year, before new learning transpires, how much time would you estimate is spent on recovering previous reading levels?		
0 weeks	4	10.0%
1-3 weeks	8	20.0%
4-6 weeks	18	45.0%
7 + weeks	3	7.5%
No opinion	7	17.5%
Totals (N=40)	40	100.0%

According to Table 5, almost half of the respondents, 45.0 percent, estimated that four to six weeks of the new school year are spent on recovering previous reading levels before new learning can take place. The next largest

segment of educators, 20.0 percent, felt that reading levels could be recaptured within the first three weeks of a new school year. Only 7.5 percent believed that it takes longer than seven weeks to regain previous reading skills. The differing degrees of estimated time probably are not as crucial as the fact of having more than 70 percent of the educators indicate, by their responses, that summer absence from the classroom does result in having to spend time recovering previous reading levels before new learning transpires as noted in Table 5. Similar results were obtained regarding math skills as detailed in Table 6.

Table 6

Results of Question Four on the Survey Instrument Used with Key Educators, from Appendix C

At the beginning of the new school year, before new learning transpires, how much time would you estimate is spent on renewing previous math skills?		
0 weeks	0	0.0%
1-3 weeks	10	25.0%
4-6 weeks	21	52.5%
7 + weeks	2	5.0%
No opinion	7	17.5%
Totals (N=40)	40	100.0%

The educators polled were aparently of the opinion that math skills, which do usually involve more complex patterns of cognition, are harder to recover than reading skills. Just over half of the respondents, 52.5 percent, estimated that it would take four to six weeks of the new school year to renew math skills. There were 25.0 percent of the educators who indicated it would take one to three weeks, and 5.0 percent estimated seven or more weeks would be needed to renew math skills before new learning could transpire. These three categories account for 82.5 percent of the educators responding which, again, congruently validated the results of Table 4.

One interesting comparison between the data in Table 5 and Table 6 is worthy of mentioning. Of the educators who responded to the survey, 10.0 percent indicated that zero weeks would be needed to recover reading skills; whereas no one, 0.0 percent, indicated zero weeks needed to renew math skills. In other words, it does indeed appear these educators were viewing math as being more difficult in skill function than reading, by their estimation of minimal time required to renew each of those skills.

Table 7 details the results of the last question on the survey. This question was designed to procure the professional educator's opinion on what the purpose (goal) of a six week summer remedial program should be.

Table 7

Results of Question Five on the Survey Instrument Used With Key Educators, from Appendix C

For consideration, the purpose of a six week summer remedial program at (name of agency) should be:		
To maintain reading and math levels?	8	20.0%
To increase reading and math levels?	5	12.5%
Both of the above	27	67.5%
Other:	0	0.0%
Totals (N=40)	40	100.0%

A full 67.5 percent of the educators responding declared that the purpose of a summer remedial program should be to maintain and increase reading and math levels. However, one would wonder how much their academic ideology influenced their response choice? Indeed, striving to maintain and increase reading and math levels would be desirable. Nevertheless, is it realistic? What can be reasonably accomplished in a six week summer program, and what standards of accomplishment would be acceptable? These questions are answered in chapter three relative to goal and outcome objectives.

In summary, a sample population of the agency's residents was established, and an analysis of their WRAT-R scores revealed that most were below their "normal" levels

in reading and math. This established the fact that there was a need for remedial help. Furthermore, local educators indicated that following summer vacation and before new learning transpires, the first four to six weeks of a new school year are spent recapturing previous reading levels and renewing math skills. Also established was the need for a remedial program to be implemented to sharpen reading and math skills during summer vacation. But why do these needs exist? What could be some possible causes?

Analysis of Causes

The foundations of a child's personality, intellect, and values are all laid during the five or six years before school. These years are probably more important to the child's future than all the school years put together. Yet many of the children placed in the agency's residential program never had those early years of proper nurturance, the benefit of a stable environment, nor adequate opportunities to develop their learning readiness. Often their lives have been traumatized by death, divorce, poor living conditions, economic stresses, frequent moves, legal problems, etc. They probably started school on the downside, and then never really had enough success or support to acquire age-appropriate reading and math skills. Or perhaps their pervasive home life caused their inability to learn and master key concepts - ie, phonics, multiplication, word definitions,, metrics, etc. If such

key concepts are neither mastered nor later acquired through the child's schooling, then a pattern of learning difficulty may follow throughout their lives.

Many of the children in the agency's residential treatment program have histories of school failure, and usually much trepidation about their academic abilities. They often perceive themselves as "losers" or "dummies" and consequently show little interest in learning. Poor academic achievement may also simply be the result of no effort, motivation, discipline, or any combination of these.

It may also be suggested, at least for some of the children, that their below-age-level reading and math skills may merely be a reflection of never having learned how to learn! For that matter, perhaps they have never enjoyed learning due to unrealistic pressures to achieve, or even negative experiences in their student-teacher relationships. Further clarification and insight into possible causes is undertaken in the next section which discusses the relationship of this problem to the literature.

Relationship to the Literature

The field of education has undergone a metamorphasis. In the late 1940's, 50's and into the 60's, the focus of educational writers was on foundational concepts; ie, what a child's education should consist of, when certain sub-

jects should be introduced, etc. Then, from this general body of knowledge, educational writers of the mid 1960's, 70's and into the 80's, have narrowed their focus to deal with specific issues of current interest to the field; ie, standardized achievement testing, federal funding of special education programs, etc. This metamorphasis, from foundational concepts to specific issues, is consequently reflected in this writing and the reader will find citations ranging from 1948 to 1987.

Some of the children in the agency's residential setting lack age-appropriate reading and math skills possibly as a result of having been pushed up through the grades, whether they really learned anything or not. Their accumulated frustrations and failures have led to further insecurity, low self-esteem, and consequently poor school performance. It has become a vicious circle for them. Sapir and Nitzbur (1973) suggested that there is a fundamental relationship between learning, growing, feeling, and psychological development - a circular process in which feeling and thinking are closely related, each reacting on the other. Such children seem to reason something like this: They feel bad about themselves, so they believe they are bad. If they are bad, then everything they try will be bad - so many will not try. Holt (1964) indicated that children lag behind academically

because they are afraid, above all else, of failing, of disappointing the many adults in their lives whose unlimited expectations for them hang like thunder clouds over their heads.

As previously mentioned, learning problems can be caused or accompanied by other problems such as disturbed relations with parents and peers, insecurity, guilt, shame, inhibited learning, and even fear of succeeding. Often such problems go untreated while the child continues to mature, his teachers continue teaching, and learning simply by-passes him! Holt (1964:97) stated,

> They (teachers) think, if a child doesn't know how to multiply, you show him how, and give him practice and drill. If he still makes mistakes, you show him how again, and give more practice. If, after you have done this about a dozen times he still makes mistakes, you assume that he is either unable or unwilling to learn....We do not consider that such a child may be unable to learn because he does not grasp the fundamental nature of the symbols he is working with. If numbers themselves are meaningless, how can multiplication be meaningful? Trying to teach such children to multiply, divide, etc., is like trying to build a ten-story building on a foundation of old cardboard boxes. With the best will in the world, it can't be done. The foundation must be rebuilt first.

In many cases, learning problems are symptoms of other problems that must be attended to before learning can take place (Pearson, 1952). For example, a child who cannot see what is on the blackboard or hear what the teacher is saying cannot learn what is being taught. A child who is exhausted, hungry, or undernourished will not have the energy needed for learning. If the home environment is

disturbed because of financial difficulty or illness, a child may not be able to pay attention in the classroom. If the community or peer group devalues school, a child may have no compelling reason to attend. Kahn and Nursten (1962) stated that children fail to attend school, literally or figuratively, for either social or phobic reasons. So if any of the above conditions have persisted, there is little wonder as to why many of the agency's residential children are educationally at risk.

Within any socioeconomic class there are wide variations in attitudes toward education. Generally speaking, upper-class parents are great believers in education as the solution to many problems - economic, social, political, etc. Middle-class parents may perceive school as a way of getting children ready for adulthood, whereas lower-class parents tend to look at education for their children as a ticket out of the neighborhood and into a better lifestyle. Yet in reality, lower-class children have three psychological obstacles blocking their development of a strong motive to achieve in school. According to Spotts and Veerman (1987) those three obstacles are: 1) the lack of intellectual role modeling on the part of the parents, 2) minimal parental encouragement of good school performance, and 3) the values of the child's peer group. Although the parents may desire their children to make a better life for themselves and escape the neighborhood, in reality these

results create a condition of "Do as I say, not as I do."

> Consider how a father's occupation affects the son's selection of a job and a lifestyle. Often doctors' sons become doctors, teachers' sons become teachers, and ministers' sons become ministers. What does the son of an alcoholic become? What does a child learn from a father who dropped out of school and cannot keep a job because of his drinking? (Spotts and Veerman, 1987:38)

In regards to how peer-group values influence motivation to achieve in school, the lower-class child receives similar conflicting messages. Davis (1948) pointed out that the peer group teaches lower-class children to have a fear of being taken in by teachers; to do any homework is absolutely a forbidden disgrace; and good grades, if ever received, are to be concealed and not bragged about. Although Davis pointed that out in 1948, not much has changed over the years. In working with lower-class students placed in the agency's care, practical experience verifies that poor school performance is often a function of membership in a lower socioeconomic peer group. With inadequate parental role models, little support and few friends who are invested in school, they see no rhyme or reason for school as it relates to their present environment or future. Spotts and Veerman (1987) argued that these students' grades and poor academic performance reinforce their feeling of failure, so they question the need for school and what good it will do. They perceive they have never had a fair chance and never will, so they

either continue to float through or drop out. Since low socioeconomic status is a probable cause for poor academic performance, it has no doubt impacted the reading and math skills of many of the agency's students.

Manning (1985) suggested that routine school practices in the early years of a child's education may cause some children to be disliked. For instance, grouping policies may force a child into a very different group of children than they are accustomed to, which may affect acceptance. Their subsequent behavior, if significantly different from the majority, may also affect their academic performance. Feelings of self-doubt, insecurity, or hopelessness may lead children to become class-clowns or class-disrupters to mask their feelings of inadequacy or frustration. Consequently, teachers and classmates may be prone to emotionally reject such a child displaying problem behaviors. According to Manning (1985) "A major concern here is that negative perceptions and emotional scars formed at an early age may remain for a lifetime." Of course, its negative impact on learning readiness and achievement are self-evident.

Emotional difficulties are not always the primary internal reasons for learning problems. There are learning disabilities, an umbrella term for dozens of information-processing disorders that can affect verbal and nonverbal performance. Silver (1976) suggested the term learning

disability is sometimes more accurate than diagnosing a child as having minimal brain damage. For learning disabled (LD) students, failure to receive accurate information through one or more of the senses can lead to problems with reading (dyslexia), math (dyscalculia), and other areas. For example, the same student who confuses words in print may find it hard to read faces or someone else's voice.

Though the causes of learning disabilities are uncertain, literature from the Michigan State Board of Education (1986) suggested that the subtle underlying brain abnormalities may result from hundreds of different factors including infections during early childhood, maternal drug abuse during pregnancy, injury at birth or in childhood, genetic problems, etc. Furthermore, learning disabilities are not caused by emotional problems, but the consistent frustration and failure many LD students experience can lead to depression and other emotional fallout, as well as poor academic performance. Until diagnosed, this situation resembles being blind and knowing there is something to see or being deaf and knowing there is sound. These children often know something is wrong but do not understand what it is or why. This helped to explain another underlying reason why many of the agency's residents were deficient in reading and math skills, and the problem was again verified by the literature.

The effects of LD disorders can often be curbed, or even reversed, by special education if children are motivated to work on their problem and willing to receive help. It has already been alluded to that a large portion of the agency's population has been evaluated and placed by the local schools in special self-contained classrooms for the emotionally impaired and learning disabled; thus enabling the schools to receive federal funding reimbursements according to Chapter One of the School Improvement Act, 1965.

Recent research findings verify the fact that academic gains made in the school year are usually lost during summer absence from the classroom, particularly for students at risk who are Chapter One eligible; again, most of the agency's population.

> In our search for effective Chapter One programs identified as "exemplary" by the U.S. Department of Education, all the programs that sent us multi-year data showed significant gains in percentile ranks for fall-to-spring testing, but by the following fall these gains had disappeared in almost every case (Slavin, 1987:111).

Although little is written which directly addresses the issue of summer absence from the classroom, there was some documentation on the scope of the reading and math problem facing America. Anderson, et.al., (1985) admitted the appalling poor reading ability of our nation's children and adults. Educators have been aware of this problem for decades, or so the literature would seem to indicate, but

they have been engaged in what appears to be a time consuming and perhaps unproductive debate about which method works best to teach reading: phonic instruction or the whole-word technique. Historically, it appears to have begun with Flesch (1955) who actually used the phonics approach to teach a 12 year old named Johnny to read; and then advocated for every child in America the same approach that had worked for Johnny. While this forever debate has raged, America's literacy problem has compounded.

Furthermore,a group of researchers has called for a complete overhaul in the way the nation teaches mathematics. An unsigned article in Kappan (1987:558) sited a research report: "In school mathematics, the United States is an underachieving nation, and our curriculum is helping create a nation of underachievers." This same article continued, "We are not what we ought to be; we are not even close to what we can be. It is time for a change - a time to renew mathematics in the United States" (Kappan, 1987:559). In summary then, the sample population's demonstrated need for remedial help in reading and math certainly is in tandem with national needs.

CHAPTER 3

GOAL AND OUTCOME OBJECTIVES

Goal

The more elements of good parenting, good teaching, and good schooling that children experience, the greater the likelihood that they will achieve their potential as adults and productive citizens. The goal of this problem-solving project did not focus on either the parenting or teaching elements. That was left for others to address, or for this writer to address some other time. Based on the demonstrated need of the agency's sample population, and on the responses of local educators, the goal of this project was to enhance the schooling element by helping some of the agency's residents to maintain their skill levels in reading and math during summer vacation.

Outcome Objectives

In order to properly delineate the outcome objectives, a target population had to be established. The same criteria used to identify the sample population was applied in selecting the target population, with one additional criteria: children selected for the target population could not be scheduled for release during the summer. It was felt that in order to fairly and clearly evaluate outcome objectives, the target population had to remain

stable from beginning to end of the project. There were 31 out of 70 children eligible for the target population, or 44.3 percent of the agency's residents. Included were the 29 children from the original sample. Two of the residents were more interested and motivated to participate in the agency's summer work program, so final size of the target population became 29 out of 70 children, or 40.3 percent of the agency's residents.

Most of the target population's WRAT-R scores revealed significantly deficient achievement levels in reading and math, and a majority of the responding educators indicated that the purpose of a remedial program should be to both maintain and improve skills. Given the time parameters and cost considerations for summer remediation, it was not realistic to endeavor to improve such deficient achievement levels. A far more realistic objective for the agency's summer remedial program was to sharpen skills in reading and math by maintaining existing achievement levels. If any improvements were realized it was to be considered a wonderful by-product, but not an objective of this project. Furthermore, helping to maintain reading and math levels could enable the reduction of time needed to renew those skills at the start of a new school year; but this project did not measure or evaluate that dimension either. Therefore, the following outcome objectives were established for this project.

Objective One: The target population's reading achievement levels shall be maintained during the six week summer remedial program. The results of a pretest shall be compared with the results of a posttest. This objective shall be met when there is no more than a ten percent difference between pretested reading achievement levels and posttested levels.

Objective Two: The target population's math achievement levels shall be maintained during the six week summer remedial program. The results of a pretest shall be compared with the results of a posttest. This objective shall be met when there is no more than a ten percent difference between pretested math achievement levels and posttested levels.

Evaluation Methods

The evaluation method for Objective One was through the use of a pretest and posttest of reading achievement. The posttest was administered on the first day of reading class, and the posttest was given on the last class day. After the six week program had been completed, the results of the pre and posttesting was compared and evaluated according to the standard of achievement established for Objective One. The testing instrument utilized was the reading section of the Quick-Score Achievement Test (Q-SAT), Forms A and B. Q-SAT is an individually administered test of basic school acheivement that measures

student proficiency. Reliability for both forms of the Q-SAT is greater than 80 percent at all age levels; and validity is supported by strong correlation with the Stanford Achievement Test, the Peabody Achievement Test, and the WRAT-R (Hammill, 1987).

The evaluation method of Objective Two was the same as for Objective One, but utilizing the math section of Q-SAT, Forms A and B. The time frames for pre and posttesting in math class was the first and last days respectively, with the comparative analysis of results occurring after the six week program and according to the standard of achievement established in Objective Two.

It was felt that if both objectives were fulfilled, as evaluated by the standards of achievement established for each, then the goal of maintaining reading and math skill levels through a program of summer remediation would indeed be fulfilled.

CHAPTER 4

SOLUTION STRATEGIES

Information Collection

The effect of children's motivations and past experiences on their school performance was discussed in chapter two. Equally important, however, is how best to teach children who are educationally at-risk, and particularly what methods and strategies should be employed in designing an effective summer remedial program. In reviewing the literature, nothing was found that specifically addresses how to design and implement a summer remedial program in a residential care setting. What was discovered, though, was an overwhelming amount of information on the need for educating at-risk students. Therefore, the writer has distilled and selectively included applicable portions of the literature, and then creatively drawn in local sources of information to construct a comprehensive reservoir of solution strategies.

According to Glasser (1986) at least half of all students are making little or no effort to learn, because they do not believe that school satisfies their needs. Spotts and Veerman (1987:38) concur and, in fact, state; "School teaches facts, figures, and other information, but it doesn't teach a kid how to survive on the streets." Glasser's (1986) control theory took this delima one step

further by suggesting that educators can not do anything to students, or even for students, to get them to produce more. Glasser (1986) advocated that school itself must change; so that students look at it and feel that school, with the teachers' help, can satisfy their needs if they work hard. Glasser's (1986) control theory is based on the premise that people are internally motivated and driven by needs that are built into the human biological structure, just as arms and legs are built into the biological structure. According to Glasser (1986), discipline problems and obstacles to learning will not occur in classrooms in which students' needs are satisfied. Such students usually will have a sense of importance in the classroom, especially if they take part in class meetings and discussions that allow them to feel accepted and significant in their academic environment. Consequently, if their class makes sense to them, then perhaps they will not break the rules of a place in which they can get what they need.

It can also be inferred from Hicks' (1974) evaluation of a remedial program, designed to provide individual remediation for seriously disturbed students in a residential psychiatric program, that a lightly structured, well coordinated program which is relevant and meaningful to the needs of the students will contribute to the effectiveness of remediation. A study done by Clary (1975) further advo-

cated that socialization and attention span, as well as interest levels, should be major classroom considerations.

Generally speaking, in today's typical classroom each student works alone. The students are told to keep their eyes on their own work; not to share; not to compare; no talking; no helping anyone else. Glasser (1986) views this approach as being totally contrary to the basic human need to belong, and it ignores the need for personal importance. Glasser (1986) mandated that teachers across America should make effective use of small learning-teams within their classrooms.

Traditionally, teachers see themselves as workers who try to stimulate the students, and, in doing so, will treat students more as objects and less as human beings. In the learning-teams concept, the teacher acts as as a consultant, a facilitator, someone who lectures once in a while, but who also teaches nontraditionally, moving (as a good manager) from team to team to give leadership, support, and encouragement to the students (who are the workers). The students might begin to reason something like this: They are a member of a learning-team! They can contribute; they can talk to the others; they can cooperate; they will earn a grade for what they do together. The concept of control theory does allow students to earn grades individually, and purports that there should never be anything rigid about the learning-team approach.

Clarey (1975) found classroom compensations helpful in relieving some of the learning frustrations often associated with a remedial program. Clarey's (1975) research with emotionally disturbed adolescents in a residential treatment center, indicated that students who have difficulty, for example, with handwriting should be given alternative ways (compensations) to finish their work; ie, use of a tape recorder, underlining or circling answers, writing a few words rather than a sentence or paragraph, utilizing large-lined paper, etc. Clary (1975) also suggested that small amounts of work should be given so students are not overwhelmed. Students must still be required to do the amount of work which they are capable of, but their assignments should be presented in small amounts. For some, visually presenting math problems one at a time, may be necessary.

Slavin's (1983) cooperative learning groups are operationalized much the same way and for many of the same reasons as Glasser's (1986) learning-teams. The only differences, seemingly, are in their names. Slavin (1984) also suggest that, for any kind of individualized instruction to be optimally effective, four conditions must be satisfied: 1) the instruction should be high in quality, 2) the instruction should be appropriate to the learners' instructional levels, 3) the student must be adequately motivated to work on the instructional tasks and, 4) the

student must have adequate time to learn.

Slavin's research during the 1980's established that, if properly organized and motivated, students could take a great deal of responsibility for their own learning, and for classroom management. By applying Slavin's own principles of cooperative learning to individualized instruction, Slavin (1987a) developed a concept called Team Assisted Individualization (TAI). In brief, students are introduced to concepts in small teaching groups before they work on them in individualized units. Research on TAI has shown that this approach could considerably improve students' mathematics achievement, although results in mathematics concepts and applications have been less dramatic (Slavin, 1987a).

Waxman, et.al., (1985) indicated that adaptive instruction uses a variety of curricula and a wide range of teaching techniques that have demonstrated their effectiveness in many types of classroom settings and with many kinds of students. Commonly used instructional strategies include mastery learning, cooperative teams of learners, and individual tutorials, as well as large and small group instruction. In the adaptive instruction approach, teachers are encouraged to match these strategies to their own teaching styles, to the learning styles of their students, and to the kind of learning objectives on which the students are focusing.

Galvin, et.al., (1983) clearly indicated that the content and process of teaching troubled youth should involve four things: 1) selecting an objective at the correct level of difficulty, 2) teaching to that objective, 3) monitoring and adjusting, 4) using principles of learning correctly; ie, proper use of reinforcements, structured and sequential presentations, practical and meaningful applications, closure, and feedback, etc. The thesis of these researchers' collaborative efforts are largely based on an approach to instruction called Instructional Theory Into Practice (ITIP). According to Galvin, et.al., (1983:13):

> ITIP is not a method or a formula, but a way of thinking about instruction. It is a description of those elements that produce good teaching and efficient learning..an articulation of how instructional theory and psychological theory relate to good teaching.

Otto and McMenemy (1966) offered specific principles for remedial teaching that incorporate accepted learning principles: 1) secure the learner's cooperation, 2) begin instruction on the student's level, 3) take small steps, 4) reinforce success, 5) keep learning tasks and materials meaningful, 6) facilitate remembering, 7) encourage student discovery of relationships, 8) guard against motivation that is too intense and, 9) build a backlog of success experiences. These nine principles could be instrumental in the effective implementation of a summer remedial

program, depending on the teachers' personality and style of teaching.

Similar to Otto and McMenemy's (1966) principles were recommendations of the United States Department of Education (1987) to improve the education of disadvantaged children. Their recommendations came from two primary sources - research on effective schools and practices of outstanding schools. Although not all inclusive, the following were some of their recommendations:

1) Create an orderly and safe school environment by setting high standards of discipline and attendance. This writer interpreted that to mean, in a summer remedial classroom, there should be clear written rules of conduct which are enforced fairly, firmly and consistently. Students should know in advance the consequences, and consequences should be set appropriate to the misbehavior. There should also be a recognition and promotion of good behavior by special praise; so some focus should be placed on students who are behaving appropriately, not just on those who misbehave.

2) Help students acquire habits and attitudes necessary for progress in school and later life. This may be accomplished by teaching students to reflect on the consequences of their actions. The teachers should discuss problems caused by irresponsible actions, what went wrong

following a disruptive incident, and how the student can keep such incidents from recurring.

3) Provide a challenging academic curriculum. In a summer remedial program, the curriculum should move students into challenging material rather than dwelling on repetitive introductory instruction.

4) Tailor instructional strategies to the needs of disadvantaged children, helping them relate new information to what they already know. Teachers should encourage the students to respond actively to questioning and classroom discussions rather than remaining passive. Learning should be structured so students have the opportunity to progress in small steps, but the pace kept brisk enough to make sure the purpose of the lesson remains meaningful.

5) Limit class size to the extent practical to provide disadvantaged students with needed individual attention and help. This would have very immediate and practical implications for a short-term summer remedial program. Of course, positive results probably would not occur unless teachers took advantage of the smaller class size and individualized their instruction.

Slavin (1987b) conducted research to identify programs that show convincing evidence of effectiveness, and practices which have been or could be used successfully with low-achieving students. He focused on programs that substantially enhance the reading and mathematics achieve-

ment of students at risk of school failure, and particularly those in programs funded by federal money from Chapter One of the School Improvement Act, 1965. Slavin's (1987b) main findings were:

1) Setting does not matter. According to Slavin (1987b), it does not seem to matter where Chapter One services are provided; what matters is the program itself.

2) Traditional diagnostic pull-outs and newer in-class models show little difference in achievement. Over the last decade, researchers have criticized schools for their pull-out practices of removing Chapter One eligible students from the regular classroom and placing them in a separate setting. Some schools have begun using in-class models in which a Chapter One teacher or aid works in the classroom with the regular teacher. Slavin's (1987b) research demonstrated that the typical pull-out or in-class program makes little lasting difference in student achievement.

3) Effective programs differ markedly from traditional models. The following is a listing and brief description of the programs that Slavin (1987b) found have the greatest potential for accelerating the achievement of students at risk:

a) Comprehensive classroom programs: These were comprehensive modifications of the regular classroom

instructional program and were designed to enable the teacher to better meet a wide range of student needs.

b) Continuous progress models: Programs in which students proceeded at their own pace through a sequence of well-defined objectives, and who were taught in small groups consisting of students at similar skill levels.

c) Cooperative learning programs: Involved students working in small, mixed-ability learning groups and who received evaluations based on the performance of all team members.

d) Preventative tutoring programs: Specially trained adult tutors who work one-on-one with students. Probably the most effective, but most expensive too.

e) Remedial tutoring programs: Adult volunteers or older students tutoring low achievers. Costs were minimized because tutors were unpaid, but effects were substantial. Also, using older students as tutors often boosted achievement gains for the tutors as well as their tutees.

f) Computer-assisted instruction: Students, in addition to receiving their routine math and reading instruction, spent additional time using a drill-and-practice program on a computer.

In an evaluation report on institutionalized facilities providing over 3,000 children and adolescents with remedial instruction, Tobias, et.al., (1982) found that student transience the single most disruptive factor affecting

remedial education. Frequent student turnover, in combination with the uncertainty as to the length of participation, made the teachers' lesson planning, learning objectives, and the requirements of pre and posttesting almost impossible to fulfill.

In addition to reviewing the literature to provide a theoretical frame of reference to the problem, possible solution strategies were also identified using two other sources of information: agency staff and school personnel. The following is a synoptic summary of those discussion meetings.

The agency staff indicated the need to structure the summer remedial program in such a way as to complement rather than compete with, the already established summer work program. The agency's work program traditionally has operated three to four hours per day, four days per week, for six to eight weeks of the summer. It has provided summer employment opportunities, teaching a variety of job skills, for about one-third of the agency's residents. The primary recommendations of the agency staff were as follows:

1) The summer work program should continue.

2) The agency's funding of the work program should not be cut or diverted for a new "unproven" summer remedial program.

3) The hours and days for summer remedial and summer work should coincide, thus enabling the child care staff to plan accordingly and minimize confusion by having residents moving in parallel directions at the same time.

4) Those children involved in summer remedial class work should be paid a wage and have an equal opportunity to generate summer earnings for themselves.

5) Going to a summer class should not be a negative experience or perceived as punishment for being "dumb".

The discussion meetings with school personnel were varied and many. There were three separate meetings with each school district's superintendent and building principals; three separate meetings with the directors of Chapter One programs from each of the local schools, and numerous meetings with teachers. These meetings yielded the following recommendations:

1) Class size should be kept small in order to offer individual attention and help, with no more than seven to eight in a class at any one time.

2) There should be no outside homework in a summer program, but opportunity for more remedial help should be given in a structured time slot and setting.

3) There should be a clear discipline policy and system of consequences for misbehavior and class disrupters.

4) The teachers employed should be familiar with cooperative learning concepts and instructional theory into practice (ITIP), as both should prove beneficial to providing educational group support and individualized instruction in a summer remedial classroom.

5) The summer remedial program should be made positive, exciting and fun to be involved in; perhaps even offering incentives for success and effort.

6) The focus should be to help make reading a pleasurable experience and enjoyable habit, while translating math concepts into practical living skills for the student's everyday life.

7) A summer remedial program should stimulate and perhaps renew the students' interest level in school and learning.

The teachers employed for this research project recommended the Grand Rapids Academic Summer Program (GRASP) reading curriculum. GRASP is a copyrighted reading program which was developed by curriculum specialists as a cost efficient substitute for the traditional summer school. The reading program consists of lessons called modules, and each module is constructed to reinforce or reteach typical basic skills found at the student's particular skill level.

In terms of mathematics, the identified summer remedial teachers recommended a curriculum based on the Individual-

ized Mathematic System (IMS). IMS is a copyrighted math program of instructional materials consisting of work pages, tests, activities, all directed at the student's specific skill level. The IMS concept is to help students enrich their mathematical knowledge and, at the same time, become better prepared for the world in which they will eventually work.

The information gathered and the theories discussed throughout this section does not represent the totality of all learning concepts and teaching methods in the domain. Nevertheless, the process of information collecting did produce some rich ideas and useful techniques that were strategically incorporated into a summer remedial program to meet the agency's needs.

Solution Strategy

Having conducted a thorough needs assessment and established the fact a problem does indeed exist; having documented the nature of the problem from the literature and analyzed its possible underlying causes, including the national scope of the problem and its uniqueness in the agency setting; having established a goal related to the problem with specific, measurable outcome objectives, as well as acceptable standards of achievement and methods of evaluations; having collected and organized information from literature and local educators, regarding available alternative and possible theoretical strategies to utilize

in resolving the problem; the next task, therefore, was to select the most appropriate strategies and develop a practical implementation plan for the agency's summer remedial program.

In order to undertake an agency project of this magnitude, the needs assessment of chapter two, along with a program budget (Appendix E:76), were presented to the agency's administration for consideration. Upon the administration's approval of the concept and budget, teachers were screened and interviewed for this project. Only teachers certified by the Michigan Department of Education were considered.

Two certified teachers were identified for employment. Besides their credentials, the two teachers were also selected on the basis of their previous training experiences. Both teachers had been trained in, and used, instructional theory into practice (ITIP) in their classroom settings. This was critically important, as it was believed ITIP (Galvin, et.al., 1983) had applicable value in making the summer remedial program effective and helpful to the students. In other words, if the teachers were able to select an objective at each student's correct level of difficulty, teach to that objective, monitor and adjust their instruction using principals of learning correctly (Galvin, et.al., 1983; Otto and McMenemy, 1966), then students should be able to maintain their reading and math

skills. Furthermore, it only stood to reason that if the teachers were able to provide high-quality reading and math instruction in a manner ideally suited to the student's needs (Glasser, 1986; Hicks, 1974; Slavin, 1984) and if learning objectives were meaningful to students and related to their life and world (Spotts and Veerman, 1987), then Objective One and Objective Two, as detailed in chapter three, should be fulfilled.

Although Waxman, et.al., (1985) advocated use of adaptive instruction and indicated its broad applicability to a wide range of curricula and classroom settings, it seemed a bit cumbersome and broad to be of intimate value in a summer remedial program. So this project opted for the simpler use of cooperative learning teams (Slavin, 1983; Glasser, 1986) in combination with individual instruction (Slavin, 1984, 1987a) and personal attention (Glasser, 1986; Clary, 1975). As previously mentioned, the two teachers selected were experienced with these concepts.

It was decided to implement summer remediation four days per week, based on the agency staff's recommendation to structure the remedial program in harmony with the already successful work program. The days and hours of both programs were scheduled Monday through Thursday, eight-thirty a.m. to noon, for six weeks. Agency administration agreed to keep funding for each program separated, unencumbered, and neither budget was to effect the other.

Class size was to be limited to no more than eight students per class hour (Glasser, 1986; Slavin, 1984,1987b; U.S. Department of Education, 1987; Formal meetings with teachers), thus enabling the teachers to properly provide educational support and personal instruction (Galvin, et.al., 1983; Slavin, 1983, 1984, 1987a, 1987b; and Glasser, 1986) to the students in their summer remedial classes. Table 8 displays the class hours and their respective sizes on each campus, derived from the data in Appendix F:78.

Table 8

Size of Classes on Each Campus

According to Class Hours

	Campus A	Campus B
1st Hour, 8:30-9:30 a.m.	8	7
2nd Hour, 9:40-10:40 am.	7	7
Total students (29)	15	14
Personal Hr., 10:50-11:50 a.m.	1-8*	1-8*

*Students selected from first and second hour classes. Size of daily personal hour did not exceed eight per class.

From Table 8, there were to be 15 students in remedial classes on Campus A for one hour each, and 14 students in

remedial classes on Campus B for one hour each. As previously discussed in chapter three, a total of 29 students in the agency's residential program were to receive summer remedial help in reading and math. Each day the teachers were to select students from the first and second hour classes, on each respective campus, to participate in the personal hour. The personal hour was an innovative feature of this project, through which students were able to receive additional instruction and personal attention (Slavin, 1984, 1987b; Glasser, 1986; Hicks, 1974; Formal meetings with teachers).

In order to make the summer remedial program worthwhile to the participating students, they were to have an equal opportunity to generate summer earnings for themselves without feeling penalized since they could not be involved in the agency's summer work program. Therefore, a system of wages was established, creating a unique "earning while learning" program for the agency. This wage system was designed to serve as extrinsic motivation and reinforcement, wherein each student would be paid for their daily classroom attendance, behavior and effort (Slavin, 1984; Spotts and Veerman, 1987; Galvin, et.al., 1983; Agency staff meetings; Formal meetings with teachers). It was hoped that the student-teacher relationship, and the child's own personal satisfaction from learning achievements, would provide the intrinsic motivation and rein-

forcement (Glasser, 1986). Table 9 portrays the student pay scale for the summer remedial program.

Table 9

Student Pay Scale for the Summer Remedial Program

	Base Earnings for Class Hour	Additional Earnings for Personal Hour
Attendance	.50	.00
Behavior	.50	.50
Effort	1.00	.50
Maximum Total	$2.00	$1.00

According to the above table, each student could have maximum daily base earnings of two dollars for one hour of remedial instruction. This translates to maximum base earnings of eight dollars per week. Those students who were requested to attend the daily personal hour on their campus had the opportunity to "earn and learn" even more. Maximum additional earnings for the personal hour was one dollar per day, or four dollars per week if requested to attend every day. The teachers kept a log of earnings, which were totaled daily (Appendix G:80) and paid every three weeks (Appendix H: 82). Each student was to be informed of their daily and weekly earnings.

Based on the information collected relative to various solution strategies, it became clear that an orderly and safe class environment was needed and, therefore, two things were mandated:

1) After the summer remedial program began, no new students would be enrolled or admitted into the program. This policy, coupled with the fact that there were no scheduled releases for members of the target population during the summer, ensured orderly and stable classes (Tobias, 1982).

2) A system of consequences for misbehavior and class disrupters was needed to help maintain a positive learning environment (U.S. Department of Education, 1987; Formal meetings with teachers). Hence, a discipline policy and system of consequences was established, based on generally accepted principles of learning theory, and linked to the student's pay scale (Appendix I:84).

The two teachers agreed that there should be no outside homework (Formal teachers' meetings) and felt that their curriculum recommendations, if approved, would provide sufficient learning experiences without having to assign outside homework. It was approved, on theoretical principles, to use GRASP for reading and IMS for mathematics (Glasser, 1986: Clary, 1975; Slavin, 1983, 1984, 1987b; Otto and McMenemy, 1966; U.S. Department of Education, 1987; Formal teacher meetings).

Both of the curriculums appeared to provide structure and multi-level learning materials; yet were flexible enough to allow the teachers to use ITIP, cooperative learning groups, individual instruction, so as to make reading and math practical and rewarding. Each subject was separated and concentrated for the students. Taking into consideration factors of time, space, programming, expense, and each teacher's demonstrated credentials and experience; reading was to be taught by only one teacher, mathematics by the other.

The reading teacher was to spend the first three weeks teaching students on one campus, while the mathematics teacher was to teach students on the other campus. Then the two teachers were to rotate campuses for the last three weeks and teach their respective subjects as highlighted in Appendix J:86. To help facilitate a smooth start-up and midway rotation of teachers, agency staff members were to serve as temporary classroom aids during the first and fourth weeks of remedial programming.

The final strategy decision involved creating an acronym by which the agency's summer remedial program could be identified. It had to be an acronym which would paint a positive picture of summer school in the minds of the students, staff, administration, teachers, the public, etc; and one that could easily link to the phraseology of "earning while learning". It was decided the agency's new

remedial program would be known and promoted as, "SMART's (Summer Math and Reading Teams) - EARNING WHILE LEARNING."

Report of Action Taken

The major tasks for this project required 16 weeks for complete implementation. Eight weeks were required for planning and organizing, six weeks for remedial programming, and two weeks for evaluating effectiveness and withdrawing of program resources (Appendix K:88). One noteworthy comment; the planning and organizing time for another agency could be more or less, depending on situational factors. For example, an agency with an established on-grounds school might find it takes fewer weeks to coordinate, organize and plan a summer remedial program with educators who are already on the agency's staff.

The means for monitoring progress and for the management of emerging problems, during the six weeks of remedial programming, was through the writer's: 1) regular contacts with the teachers, students and agency staff, and 2) weekly review of the classroom teacher's daily log (Appendix L:91). Both of these methods provided a continual process of monitoring and expedited corrective action when necessary.

The solution strategy, as detailed earlier in this chapter, was carried out as intended and went remarkably smooth. A key factorfor this smoothness was communication. Both teachers and agency staff felt that communicating with

each other became critacally important as the program progressed. Whenever there was clear communication, the agency staff understood more accurately what the teachers were trying to accomplish and, thus, were better able to support their efforts. Of course, the opposite was also true. For example, some of the students enjoyed trying to run "con-games" on the teachers; i.e., one student told his teacher the staff said he could leave class early to go on a homevisit, but staff had already informed the teachers that homevisits were set for the third weekend of the month. Again, good communication became an unwritten and essential element for smooth operations.

At the midway point of the project, it became necessary to change the class days. During the first three weeks the classes were held on Monday through Thursday, but the last three weeks classes were held Monday, Tuesday, Thursday and Friday. This adjustment was made to allow the agency staff to attend a Wednesday morning staff meeting. The agency's work program was also adjusted to coincide with this change. The need was identified and corrective action taken as a result of the regular contacts with teachers and agency staff.

The size of the target population had to be adjusted downward, from 29 students to 27, as two students left the agency's care prior to the start of the project. One youth was ordered by probate court into another placement, and

the other youth truanted. Neither circumstance could be anticipated nor controlled, so the final target population consisted of 27 residents. This, along with changing the days of classes, were the only two adjustments made in the implementation of the summer remedial program.

Chapter 5

RESULTS, CONCLUSIONS AND RECOMMENDATIONS

Results

Children placed in the agency's residential care program often are far below "normal" age level in reading and math. With the agency using public schools for education, simple gains achieved during the regular school year are often blunted with summer absence from the classroom. Therefore, the goal and focus of this project was to help some of the agency's residents to maintain their reading and math skill levels during summer vacation. The following information reports on the outcome of the two objectives established in Chapter 3.

Objective One: The target population's reading achievement levels shall be maintained during the six week summer remedial program. This objective shall be met when there is no more than a ten percent difference between pre and posttested reading achievement levels. Table 10 summarizes the results.

Table 10

Comparison of Pretest and Posttest Results Measuring Reading Skills Levels, Derived from Q-SAT scores in Appendix M

Reading Skill Level	Number of Students	Percentage of Students
Increased	18	66.7%
Maintained	8	20.6%
Decreased	1	3.7%
Totals (N = 27)	27	100.0%

According to Table 10, only about four percent of the target population decreased in their reading skill level as measured by Q-SAT testing. Since four percent is less than the established ten percent standard, Objective One was achieved! Again from Table 10, 29.6 percent maintained their reading skill level while 66.7 percent actually improved. By combining these two figures, it can be said that 96.3 percent of the target population benefited positively by the six week summer remedial program in reading. Although the objective was merely to maintain their reading skill levels, the results obtained were outstanding.

Objective Two: The target population's math achievement levels shall be maintained during the six week summer remedial program. This objective shall be met when there is no more than a ten percent difference between pre and posttested math achievement levels. Table 11 summarizes the results.

Table 11

Comparison of Pretest and Posttest Results Measuring Math Skill Levels, Derived from Q-SAT Scores in Appendix N

Math Skill Level	Number of Students	Percentage of Students
Increased	19	70.4%
Maintained	4	14.8%
Decreased	4	14.8%
Totals (N = 27)	27	100.0%

From Table 11, it can be seen that 14.8 percent of the target population decreased in their math skills level as measured by Q-SAT testing. With 14.8 percent being greater than the established ten percent standard, Objective Two was not achieved. However, looking beyond the stated objective standard, 14.8 percent of the target population also maintained their math skill level while 70.4 percent increased their level. Combining these two figures indi-

cates that 85.2 percent of the students benefited from being involved in the six week summer math remedial program. Therefore, although Objective Two was not met as stated, significant and positive results still occurred in this area of the project. Table 12 offers further evidence of effectiveness.

Table 12

Comparison of the Mean Scores of Pretesting and Posttesting, Derived from Appendices M and N

	Pretesting Mean Score	Posttesting Mean Score
Reading	5.33	6.55
Math	5.81	7.37

According to the above table, the mean scores raised on both skill levels after six weeks of remedial programming. This again implies that the project was successful in helping a segment of the agency's residents with their reading and math skills.

The students were questioned (Appendix O:97) on the last day of class about their perceptions on whether or not the SMART's program helped? Their responses are tabulated in Table 13.

Table 13

Results of Student Perceptions as Surveyed on The Last Day of Class, from Appendix O

SMART's helped their:	Reading		Math	
Yes	20	74.1%	23	85.2%
No	6	22.2%	2	7.4%
Unanswered	1	3.7%	2	7.4%
Totals (N = 27)	27	100.0%	27	100.0%

From Table 13, 74.1 percent of the students subjectively perceived themselves as having been helped in reading as a result of their involvement in the summer remedial program. Of the students involved, 85.2 percent felt they had been helped in math. Both of these figures support the objective findings previously discussed. In other words, the data from Tables 10 - 12 indicate the program helped to maintain reading and math skill levels, while results of Table 13 indicate the majority of students personally believe they were helped.

CONCLUSIONS

Most of the troubled youth placed in the agency's residential care program are educationally at risk. During their school years, these students must acquire the skills and attitudes that will enable them to master all kinds of new skills and understanding later in life. So the need was identified and verified for the agency to provide a summer remedial program to help sharpen (maintain) reading and math skills, two of the foundational subjects needed for proper development of life skills.

Two students stated on a survey (Appendix O:97), that the program: 1) "helped me out in my weak spots", and 2) "helped me review and get ready for the school year." Almost all the students indicated they enjoyed earning money while learning. It was rewarding for some and motivating for others, while a few wanted to be paid more without having to earn it. On the negative side, many of the students didn't like having to get up early each morning in the summer to go to class. One even suggested that to improve the program, "we should all sleep-in and do summer school in the afternoon!"

Most of the agency staff liked the concept of doing a summer remedial program, but some of the child care staff expressed concerns regarding the loss of control in their summer schedules. They felt they had less freedom and more confusion, especially with residents assigned to either the

work program or new remedial program. In analyzing this closer, the writer discovered that the seasoned child care staff, who had been at the agency for at least one other summer, were the most vocal and resistant to change. On the other hand, the new staff were highly supportive of the concept since they had no prior experience with which to compare.

The teachers indicated through written daily logs (Appendix L:91) their appreciation of agency support. The teachers cited, as examples: the provision of suitable classrooms for instruction, curriculum materials appropriate for educationally at risk students, requiring students to attend, maintaining a stable student population for the duration of the program, and the opportunity for timely communication with agency staff. The teachers expressed frustration over some staff subversiveness, primarily from seasoned staff, who repeatedly forgot to call and inform the teachers when a student was sick or going to be late.

Pretesting and posttesting was conducted by the teachers during class time, and Q-SAT was not found to be burdensome. The math teacher noted that some of the test problems on Form B of Q-SAT had not been covered in the summer remedial math class. It is not known to what degree this may have effected, if any, the posttest results due to the students being unfamiliar with certain problem solving

processes. Nevertheless, Q-SAT is still believed to be a valid and reliable indicator of achievement levels, especially in the context of a brief six week remedial program. Furthermore, Q-Sat's scoring mechanism is designed to compensate for such variables.

The teachers typically worked with small groups, as well as with one student at a time. Both teachers reported that the students enjoyed and benefited from the cooperative learning teams, and that individual instruction proved most effective in building rapport and improving student motivation. The teachers also reported that the non-commercial instructional materials which they used, to make learning practical, was well received by the students. Examples of the learning aids included dictionary games, help wanted ads, map reading, metric tools, grocery weights and prices, math games, etc. Such materials complimented the curriculum and helped translate concepts into everyday life for these troubled youth.

Findings of the project are significant, resultant benefits are deemed positive, and the final conclusion is a clear picture of reality drawn from Holt (1964:27),

> Not many children, in one school year, are going to remake their whole way of dealing with life. With luck, we can give them a a feeling of what it is like to turn one's full intelligence on a problem, to think creatively, originally, and constructively instead of defensively and evasively. We can hope that they will enjoy the experience enough to want to try it again; but is only a hope. To put it another way, we

can try to give them a glimpse of an intellectual foreign country, and even persuade them to visit it for a while; but it would take more time than we have to make them citizens of that country.

RECOMMENDATIONS

1. Without question this program can be replicated.
2. There should be no more than eight students in a class.
3. The "earning while learning" monetary system of reinforcement proved beneficial and should be used.
4. Teaching techniques similar to those described and used in this project are recommended.
5. Only certified teachers should be employed.
6. Thirty class hours of instruction per pupil should be offered, thereby enabling students to earn one-half credit toward high school graduation.
7. Consider structuring class time into a three hour period, two days per week, for five weeks.
8. If only one subject is taught, it should be based on the findings and results of this project, it should be reading.
9. Consider including the Science Research Associates (SRA) curriculum, which emphasizes comprehension.
10. For smooth operation, keep communication open between teachers and agency staff.

11. If pretesting and posttesting is conducted, it should be kept simple, meaningful, and yield reliable data. Q-SAT is recommended.

FOLLOW ON

The demonstrated results of this project have convinced the agency staff and administration that summer remedial programming is both needed and worthwhile. As of this writing, the remedial program is being planned for next summer, and will be modified only slightly to harmonize with the above conclusions and recommendations. A formal proposal for funding of the remedial program is underway for presentation to foundations.

The information and findings generated by this project should be made available to child care practitioners and agencies, to teachers and schools, and to anyone interested in the educational welfare of troubled youth. The most efficient method of dissemination would be through national computer databases appropriate to this subject matter. Another possibility is through the writer's own efforts to produce a condensed version of this report, one which would be suitable for journal or trade publication.

REFERENCES CITED

Anderson, Richard C., et. al. Becoming a Nation of Readers: The Report of the Commission on Reading. Urbana: Center for the Study of Reading, University of Illinois, 1985.

Clary, Sonja. "Diagnosis and Prescription for L.D. Problems of E.D. Adolescents Within A Residential Treatment Center." ERIC ED 126 627.

Davis, A. Social Class Influences Upon Learning. Cambridge: Harvard University Press, 1948.

Flesch, Rudolph F. Why Johnny Can't Read. New York: Harper, 1955.

Galvin, Jim, et. al. "National Youth Guidance Task Force on How Troubled Youth Learn." Unpublished White Paper. Seattle Pacific University, 1983.

Glasser, William. Control Theory in the Classroom. New York: Harper & Row, 1986.

Hammill, Donald D., et. al. Quick Score Achievement Test. Austin: Pro Ed, 1987.

Hicks, John S. "Individualized Instructional Program for Emotionally Disturbed Children Unable to Participate in Formal Educational Programs." ERIC ED 136 464.

Holt, John. How Children Fail. New York: Dell Publishing Co., Inc., 1964.

Jastak, Sara, and Gary S. Wilkinson. Wide Range Achivement Test - Revised. Wilmington, Delaware: Jastak Associates, Inc., 1984.

Kahn, J.H., & J.P. Nursten. "School Refusal: A Comprehensive View of School Phobia and Other Failures of School Attendance." American Journal of Orthopsychiatry, 39, 1962, pp.707-18.

Manning, M. Lee. "How Teachers Can Help the Child Nobody Likes." Day Care and Early Education. 12. Summer 1985, pp.16-17.

Michigan State Board of Education. Revised Administrative Rules for Special Education. Lansing: Michigan State Board of Education, 1986.

Otto, Wayne, and Richard A. McMenemy. Corrective and Remedial Teaching. Boston: Houghton Mifflin Co., 1966.

Pearson, G.H. "A Survey of Learning Difficulties in Children." Psychoanalytic Study of the Child, 7. 1952, pp.322-86.

Sapir, S. G., & A.C. Nitzburg. Children with Learning Problems. New York: Brunner/Mazel, 1973.

Silver, L. "The Playroom Diagnostic Evaluation of Children With Neurologically Based Learning Difficulties." Journal of the American Academy of Child Psychiatry. 15. 1976, pp.240-56.

Slavin, Robert E. "When Does Cooperative Learning Increase Student Achievement?" Psychological Bulletin. 94. 1983, pp.429-45.

Slavin, Robert E. "Component Building: A Strategy for Research Based Instructional Improvement." Elementary School Journal. 84. 1984, pp.255-69.

Slavin, Robert E. "Making Chapter 1 Make a Difference." Phi Delta Kappan, October, 1987, pp.110-19.

Slavin, Robert E. "Cooperative Learning and Individualized Instruction." Arithmetic Teacher. 35. November 1987, pp.14-16.

Spotts, Dwight, and David Veerman. Reaching Out to Troubled Youth. Wheaton: Victor Books, 1987.

Tobias, Robert, et. al. "Title I Institutionalized Facilities Program. O.E.E. Evaluation Report, 1981-82." ERIC ED 227 195.

U.S. Department of Education. From "What Schools Can Do" in What Works: Schools That Work: Educating Disadvantaged Children. Washington D.C.: U.S. Department of Education, 1987.

"U.S. Math Curriculum Needs Overhaul, New Study Says." Phi Delta Kappan. March 1987, pp.558-9.

Waxman, Hersholt C., et. al. "Adaptive Education and Student Outcomes: A Quantitative Synthesis." Journal of Educational Research. 78. 1985, pp.228-35.

APPENDIX A

RESULTS OF THE SAMPLE POPULATION'S WIDE RANGE ACHIEVEMENT TESTING (WRAT-R)

Student	Age at time of Testing (in years)	Date of Testing	Reading Grade Rating	Math Grade Rating
1	14	11/87	<3	4B*
2	14	7/87	<3	5E*
3	15	7/87	12B	4E
4	13	6/87	<3	3B
5	16	4/88	8B	7B
6	13	2/88	6E	4B
7	14	4/88	7E	7B
8	14	8/87	8B	>12
9	15	1/88	8B	7E
10	17	1/88	8B	3E
11	15	3/88	4E	11B
12	13	8/87	9E	7B
13	14	4/88	8E	10E
14	14	4/88	5E	4B
15	14	11/87	3E	9E
16	15	10/87	5B	5E
17	14	4/88	>12	7B
18	15	4/88	<3	3B
19	13	7/87	<3	5B
20	15	5/87	<3	6E
21	15	4/88	<3	4E
22	15	4/88	10B	5E
23	16	2/88	10B	7B
24	13	4/88	4B	5B
25	14	4/88	8E	9E
26	16	4/88	9E	7E
27	12	9/87	5E	5B
28	17	2/88	9B	6E
29	15	9/87	4B	4E

*Grade ratings are reported in two ways; with a number grade, and letters "B" for Beginning of the school year or "E" for End of the school year.

APPENDIX B

FIRST LETTER TO KEY EDUCATORS REGARDING SUMMER REMEDIAL NEEDS ASSESSMENT

April 29, 1988

Dear Educator,

You have been selected to complete the enclosed questionnaire because of your professional role with students from (name of agency). Your immediate response would be appreciated, as the administration of (name of agency) is currently considering implementation of a summer remedial program for (name of agency) students who are at-risk educationally.

Your responses will remain confidential, and will be used only by (name or agency) administration to assess the need for summer remedial programming. Enclosed is a pre-paid business envelope in which to conveniently return your completed questionnaire. Please do so by May 9, 1988.

I will send you another letter regarding the results of the questionnarie and our subsequent decision.If you have any questions, I may be reached at (telephone number). Thank you for your kind cooperation.

Sincerely,

Gary D. Bennett
Director of Social Services

GDB/mjb
Enc.

APPENDIX C

SURVEY INSTRUMENT USED WITH KEY EDUCATORS REGARDING SUMMER REMEDIAL NEEDS ASSESSMENT

SUMMER REMEDIAL NEEDS ASSESSMENT

Check only one response for each question. Written comments are welcomed. Return by May 9, 1988. Thank you!

1. During the 1988 summer vacation, (name of agency) may provide a six week remedial program with an emphasis on reading and math skills. Should (name of agency) provide such?
   _____ Yes
   _____ No

2. In your professional judgement, what effect does summer absence from the classroom have on educational gains achieved during the previous school year, especially for students who are educationally at risk?
   _____ No effect; gains are retained
   _____ Some effect; gains often diminished
   _____ Significant effect; gains are lost
   _____ No opinion

3. At the beginning of the school year, before new learning transpires, how much time would you estimate is spent on recovering previous reading levels?
   _____ 0 weeks
   _____ 1 - 3 weeks
   _____ 4 - 6 weeks
   _____ 7+ weeks
   _____ No opinion

4. At the beginning of the new school year, before new learning transpires, how much time would you estimate is spent on renewing previous math skills?
   _____ 0 weeks
   _____ 1 - 3 weeks
   _____ 4 - 6 weeks
   _____ 7+ weeks
   _____ No opinion

5. For consideration, the purpose of a six week summer remedial program at (name of agency) should be:
   _____ To maintain reading and math levels?
   _____ To increase reading and math levels?
   _____ Both of the above
   _____ Other:

Signed_____Date_____

Position_____

School_____

APPENDIX D

SECOND LETTER TO NON-RESPONDENTS REGARDING SUMMER REMEDIAL NEEDS ASSESSMENT

May 5, 1988

Dear Educator,

If you have not yet returned your questionnaire, please allow this letter to serve as a reminder. If you have, thank you! Perhaps our mailings have crossed.

In case you have lost or misplaced the questionnaire, I'm enclosing another with a pre-paid business envelope in which to return it. Your completed questionnaire should be mailed by May 9, 1988. Again, your responses will remain confidential, and will be used only by (name of agency) administration to assess the need for summer remedial programming.

I will be sending you a letter regarding the results of the questionnaire and our subsequent decision. If you have a question, I may be reached at (telephone number). Your immediate response will be greatly appreciated.

Sincerely,

Gary D. Bennett
Director of Social Services

GDB/mjb
Enc.

APPENDIX E

PROPOSED BUDGET FOR A SUMMER REMEDIAL PROGRAM EMPHASIZING READING AND MATH

Wages & Benefit Expenses		
Teachers	$3,800	
Students	1,800	
Total Wages & Benefit Expense		$5,600
Supplies		
Office	$ 75	
Classrooms	150	
Curriculum	700	
WRAT-R Instruments	75	
Q-SAT Instruments	100	
Total Supplies & Expense		$1,100
General Administrative Expense		$2,000
Total Expenses		$8,700

APPENDIX F

CLASS CONSCRIPTIONS SHOWING STUDENTS AND GROUP HOMES

CAMPUS A

1st Hour, 8:30 - 9:30 a.m.

1. From House #1
2. From House #1
3. From House #2
4. From House #2
5. From House #2
6. From House #3
7. From House #3
8. From House #3

2nd Hour, 9:40 - 10:40 a.m.

9. From House #1
10. From House #1
11. From House #1
12. From House #2
13. From House #2
14. From House #4
15. From House #4

CAMPUS B

1st Hour, 8:30 - 9:30 a.m.

16. From House #5
17. From House #5
18. From House #5
19. From House #6
20. From House #6
21. From House #7
22. From House #7

2nd Hour, 9:40 - 10:40 a.m.

23. From House #5
24. From House #5
25. From House #6
26. From House #6
27. From House #6
28. From House #7
29. From House #7

Personal Hour, 10:50 - 11:50 a.m., Campus A and B

Students selected from first and second hour classes on each respective campus. Size of daily personal hour did not exceed eight per class.

APPENDIX G

DAILY LOG OF STUDENT EARNINGS

NAME_____WEEK #_____

Class Earnings $_____

P.H.* Earnings $_____

DAILY TOTAL $_____

Class Earnings $_____

P.H. Earnings $_____

DAILY TOTAL $_____

Class Earnings $_____

P.H. Earnings $_____

DAILY TOTAL $_____

Class Earnings $_____

P.H. Earnings $_____

DAILY TOTAL $_____

WEEKLY TOTAL $_____

Student_____Date_____

Teacher_____Date_____

*P.H. = Personal Hour

APPENDIX H

RECEIPT FOR PAYMENT OF STUDENT EARNINGS

NAME_____

Week #1 Total $_____

Week #2 Total $_____

Week #3 Total $_____

FIRST PAY TOTAL $_____

I have earned and received the above as my pay for being in SMART's (Summer Math And Reading Teams)!

Student_____Date_____

Week #4 Total $_____

Week #5 Total $_____

Week #6 Total $_____

SECOND PAY TOTAL $_____

I have earned and received the above as my pay for being in SMART's (Summer Math And Reading Teams)!

Student_____Date_____

APPENDIX I

DAILY DISCIPLINE POLICY FOR THE REMEDIAL CLASSROOMS

FIRST INFRACTION

1. The student's name is placed on the chalk board as a warning.

2. The student now has a chance to change his behavior, and do what has been asked of him without further discipline.

SECOND INFRACTION

1. A check mark (v) is placed by the student's name, and

2. The student is docked $1.00 from his earnings.

3. No further discipline will occur if the student changes his behavior and does what has been asked of him.

THIRD INFRACTION

1. A second check mark (vv) will be placed by the student's name, and

2. A second $1.00 is docked from the student's earnings, and

3. The student will be assigned to the daily Personal Hour to:

   a. Receive personal time in order to complete assigned work.

   b. Earn $1.00 for attendance and effort in the Personal Hour.

4. No further discipline will occur if the student changes his behavior and does what has been asked of him.

FOURTH INFRACTION

1. A third check mark (vvv) will be placed by the student's name, and

2. The student will be dismissed for the remainder of the hour, and

3. The student will receive one hour of campus maintainance (non-paid) to be completed that day, and

4. The student must still participate in the Personal Hour as previously outlined.

APPENDIX J

TEACHER ROTATION SCHEDULE FOR THE TEACHING OF READING AND MATH ON TWO CAMPUSES

	Weeks 1 - 3	Weeks 4 - 6
Teacher A: Reading	Campus A	Campus B
Teacher B: Mathematics	Campus B	Campus A

APPENDIX K

SCHEDULE OF IMPLEMENTATION

Preliminary Steps

1. Conduct preliminary needs assessment.
   a) Agency staff planning and evaluation.
   b) Meetings with superintendents and principals from three community schools.
   c) Meetings with each school's director of Chapter One programming.

2. Secure preliminary approval from agency administration.
   a) Rough draft of proposed concept.
   b) Establish rough budget.

3. Conduct formal needs assessment.
   a) Identify agency sample population.
   b) Obtain WRAT-R scores in reading and math for sample population.
   c) Survey local educators.
   d) Compile and analyze all data.

4. Secure final approval from agency administration
   a) Concept paper finalized
   b) Budget finalized

Implementation Plan

Weeks One - Three

1. Establish target population for project
2. Secure two certified teachers.
3. Establish student pay scales and classroom discipline policy.
4. Identify pre and posttest for evaluating effectiveness; order.
5. Begin fund raising efforts.

Week Four

1. Identify curriculum materials; order.
2. Conduct classroom site visits with teachers.
   a) Identify equipment needs; order.
   b) Identify supply needs; order.
3. Schedule class days and hours, teacher functions, student enrollments.

Weeks Five - Seven

1. Disseminate information to staff and targeted students.
2. Review curriculum materials.
3. Review pre and posttest procedures
4. Design student pay forms and teacher's daily log.

Week Eight

1. Set up classrooms, stock supplies and equipment.
2. Assign agency staff to serve as classroom aids for weeks nine and twelve.

Weeks Nine - Eleven

1. Begin first half of remedial programming
   a) Pretest on first day of class.
   b) Monitor teacher's daily logs.
   c) Take corrective action as may be needed.
2. Rotate teachers at end of first half of program.
3. Pay students at end of first half of program.

Weeks Twelve - Fourteen

1. Continue second half of remedial programming.
   a) Monitor teacher's daily logs.
   b) Take corrective action as may be needed.
   c) Posttest on last day of class.
2. Pay Students at end of second half of program.

Weeks Fifteen and Sixteen

1. Analyze and evaluate effectiveness
2. Withdraw resources and restore classes to meeting rooms.

APPENDIX L

CLASSROOM TEACHER'S

DAILY LOG

_____Reading
_____Math

DATE BRIEF NOTATION ON THE DAY (Noteworthy events, concerns, etc.)

APPENDIX M

READING SCORES FROM PRETESTING AND POSTTESTING WITH TWO FORMS OF QUICK-SCORE ACHIEVEMENT TESTING (Q-SAT)

Student	Pretest, Form A Standard Score *	Posttest, Form B Standard Score *
1	2	5
2	2	5
3	5	5
4	5	5
5	5	6
6	5	8
7	6	7
8	7	9
9	5	8
10	**	**
11	5	5
12	8	9
13	6	8
14	5	8
15	8	7
16	6	7
17	***	***
18	2	2
19	2	3
20	6	7
21	5	5
22	6	6
23	7	7
24	6	7
25	7	9
26	6	8
27	7	8
28	5	8
29	5	5

* Standard scores are transformations of raw scoress that provide equivalent indices which are comparable.

** Discharged

*** Truanted

APPENDIX N

MATH SCORES FROM PRETESTING AND POSTTESTING

WITH TWO FORMS OF QUICK-SCORE

ACHIEVEMENT TESTING (Q-SAT)

Student	Pretest, Form A Standard Score *	Posttest, Form B Standard Score *
1	4	3
2	7	7
3	6	8
4	2	3
5	5	5
6	3	6
7	5	7
8	7	11
9	6	8
10	**	**
11	9	8
12	11	10
13	8	11
14	3	4
15	7	9
16	5	8
17	***	***
18	1	1
19	5	10
20	7	9
21	4	6
22	5	7
23	7	8
24	6	5
25	6	10
26	6	9
27	8	11
28	6	7
29	8	8

* Standard scores are transformations of raw scores that provide equivalent indices which are comparable

** Discharged

*** Truanted

APPENDIX O

SURVEY INSTRUMENT USED

WITH STUDENTS ON LAST

DAY OF CLASS

SMART'S EVALUATION

WHAT DID YOU LIKE BEST ABOUT SMART'S?

WHAT DID YOU LIKE LEAST ABOUT SMART'S?

DO YOU THINK SMART'S HELPED IN READING?

DO YOU THINK SMART'S HELPED IN MATH?

SUGGESTIONS TO IMPROVE SMART'S:

NAME_____DATE_____